



EMERGING TECHNOLOGIES IN CLASSROOM TEACHING

Franklin Thambi Jose. S

Sultan Idris Education University.

ABSTRACT

Technology is a collection of techniques and procedures used in the production of new goods or products by scientific experiments or investigations. Computer is one of the inventions and been used widely in the modern societies. It is used in classroom teaching after the inclusion of multimedia. Classroom is a space to learn usually indoors with teaching and aids. At present, most of the classrooms are well equipped with technology. It makes classroom active and makes the teachers and the learners ease to teach and learn. Such technology is not exempted from a language classroom. The language classroom technologies includes, Computer aided Language Teaching / Learning (CALT/CALL), Software based Teaching and Learning (STL), Robot assisted Language Teaching / Learning (RALT/RALL), Robot assisted Language Teaching / Learning (MALT / MALL), etc. This paper tries to explain the introduction of Mobile assisted Language Teaching (MALT) in the classroom. Moreover it describes the advantages of MALT in classroom teaching situation.

KEYWORDS: Technology, Computer, Multimedia, Classroom, Mobile, Teaching.

1. INTRODUCTION

Technology is a collection of techniques and procedures used in the production of new goods or products by scientific experiments or investigations. Computer is one of the inventions and been used widely in the modern societies. It plays an important role in our daily life. It is an electronic device, which responds to the input given. It makes human work ease and solves the problematic issues. The features of computer are speed, storage, accuracy, automation and diligence.

A drastic revolution came to exist in the field of teaching and learning after the inclusion of computers in the classroom. It created interaction facility with the introduction of multimedia in the classroom. It made the classroom colorful and also solved most of the teaching and learning issues. It also made the teaching and learning processes an easy one. During this period computer aided language teaching and learning was introduced in classroom. Later, teaching and learning was introduced with software. These all were introduced because of the technologies used in the classroom.

This paper tries to explain the introduction of emerged new technology, Mobile assisted Language Teaching (MALT) in the classroom which is used in different countries. Furthermore, it describes the advantages of MALT in classroom teaching situation.

2. TECHNOLOGY

'Technology is the branch of knowledge which deals with the creation or invention and the use of techniques and approaches' (Chinnery; 2006). Technology means 'science of craft' in Greek language. The term 'technology' has been derived from the Greek words 'techné' and 'logia' which have the meanings "art or skill" and 'collection of techniques or procedures' respectively. Huges (2004) says, technology is the keyway to solve problems.

Earlier, technology had a close relationship only with science. Science is gained through observed experiments systematically through the knowledge of the physical or material world. Hence, starting from the invention of fire, technology in science started through the ancestors. Technology then spread worldwide and other fields such as engineering, medicine and education took it for their purpose. In engineering, the goal oriented process of designing, manufacturing the tools and systems to exploit natural phenomena are the results of technology. Computer is the product of this technology. The goods like, electrons, conductors, transistors, etc. and new inventions and new products and new industries gave jobs to many in the field of engineering due to technology says Bush (1945). In education, technology came to exist 4 decades back. They named this as educational technology. Dekel (2006) says, educational technology for learning management systems (LMS), are tools for student and curriculum management, and education management information systems (EMIS). Because of the education technology, technology entered into the classroom with latest updates.

3. TECHNOLOGY IN CLASSROOM

Technology in classroom changed the entire classroom environment. In the beginning computers were introduced in the classroom and the classrooms were equipped with computers. Teachers started to teach with computers. Later, many countries, according to their economic status, started to provide computer in all the classrooms. According to this, all the students will have their own computer that can be used in the classroom. This created new learning opportunities and many instructional tools to the students. Since the learning potential is encourag-

ing, some of the educational institutions started to provide internet facilities. They trained the teachers and students to use both the computers and internet efficiently.

David (2001) says technology has altered the teaching and learning processes after the introduction of computers and internet. Technology has introduced laptops, smart mobiles or smartphones and other computer and mobile devices in the classroom. Though there are a lot of advantages of introducing the technology in the classrooms like, makes ease to understand, creates enthusiasm, awareness, vigilance, etc. and there are disadvantages too. Robert (2016) says, the introduction of technologies in classroom like, smartphones, laptops, etc. continue to produce lots of drama between students, teachers, and administrators in universities and high schools across the US. These may be issues in other countries too. The disadvantages like, boring because of repetition, distracts the classroom learning atmosphere, health issues, etc. These disadvantages didn't affect and continues to be a part of classroom teaching.

4. CLASSROOM TEACHING

'Classroom is a place where teaching and learning takes place using models or approaches or techniques usually happens in a closed indoor' (Gavin, 2000). A classroom consists of a teacher and students who belong to various backgrounds. A good classroom can be called as a good learning environment. Classroom management plays a huge role in the field of teaching and learning. It can be defined as, different types of skills and techniques used by the teachers, to keep students well organized, disciplined, focused, attentive and academically productive inside a classroom.

Classroom teaching implemented many methods to teach. Some of them are grammar translation method, direct method, indirect method and eclectic method. Of these eclectic method of teaching is used widely. It is a mixture of many teaching methods used by a teacher to attract and motivate the learners. Apart from these teaching methods, there are four main teaching approaches such as teacher-centred methods, learner-centred methods, content-focused methods and interactive/participative methods. The teacher in a present classroom situation has to deliver lecture, make students to actively participate, involve them in individual or group discussion, and provide activities. These are not an easy task for the teachers individually. So they started to introduce computers in the classroom which has the ability to do multitask works. The introduction of computers changed the entire teaching and learning processes (Sam & Venkatesan, 2003). The advantages of this type of teaching are enumerable. Because of the advantages like, makes teaching and learning easy, creates creativity among students, provides interaction facilities between the students and computers etc. computer aided teaching and learning packages were introduced.

5. REVOLUTION BY CALT

Computer is an electronic device which can process any input given and gives the result as output. The output can be viewed or heard. The important features of computer are accuracy, speed and energy saving. Most of the teaching, learning and research are been carried out using computer and can be brought under Natural Language Processing (NLP). The use of natural language processing became familiar because teachers, students, researchers and scholars started to use corpus for every academic work. It brought the technologies and human together. To make the computer automatic, i.e. automatically analyze, understand and generate language texts, a set of linguistic and non-linguistic information should be

incorporated into the system using programming languages in the form of rules. By incorporating the information to a computer, the computer technology (ie. computer and natural language) in teaching or learning situation can be realized. Such computer technology paved the way to Computer aided Language Teaching / learning (CALT / CALL).

Computers have been used for language teaching for more three decades (Gunduz, 2005). This is due to the importance of computers in the language learning process. At present, not only computers, even laptops, mobiles, tablets were introduced in language teaching.

CALT plays a huge role in the current teaching and learning situation. 'Computer aided Language Teaching (CALT) is an approach in which computer technology is used as an aid for presentation, reinforcement and assessment of material to be learned, usually including a substantial interactive element' (Ahmad, 2010). CALT has been used as a tool to teach language throughout the world. In 1980's when computer was used in language teaching, it was represented as computer assisted language instruction (CALI). This is because the information were provided to the computer using instructions. Later CALT became a dominant term.

CALT brought a revolution in the history of language teaching and learning. It has an amusing interaction feature. With this feature, it can interact like human being. But it is only a supplementary material and it can never replace a teacher in the current situation. Students can use this and evaluation can be done. The computer can take the responses from the learners, evaluate them and if the answer is wrong, it can pinpoint the mistake and able to explain, how the answer is wrong or in which way it is wrong, etc. This provides a complete satisfaction to the learners. CALT in a classroom has many advantages such as, creates interest, provides higher order thinking skills, motivates the learners, demands active participation, allows the learners to work at their own time and own place, never gets tied and executes the same again and again.

As mentioned earlier, it can never replace a teacher in the current teaching situation. The materials for CALT are prepared, developed and incorporated to the computer by teachers or subject experts.

Material production is the main area in the CALT. Apart from the important features of computer, as mentioned earlier, text size, font, color, graphics, animation, sound, human voice, video, etc. are used in classroom teaching. These features are essential to prepare materials for CALT. 'Language Teaching through computer, itself is an art and it needs to be handled more artistically by the material developers, language instructors as well as the language students' (Sam & Venkatesan, 2003). The features mentioned above to prepare materials for CALT are extracted through a powerful tool called multimedia.

6. MULTIMEDIA

Multimedia includes a collection of tools which were used separately. It was coined by Bob Goldstein, a famous singer and artist. Before the coinage of 'multimedia' he introduced a term called 'intermedia'. This term was used for various purposes till 1990. In 1990, the term 'multimedia' was used in the field of education. After the introduction of multimedia, there was a tremendous change in the computer application, particularly in the areas of education, i.e. teaching / learning. Ganesan (1999) has defined multimedia as 'It is a combination of texts, graphic art, animation, video elements, sound and human voice with interactive facilities'.

Multimedia was used in CALT, Online teaching, etc. effectively. In teaching and learning processes, multimedia was for presentation and game system. During presentation, one can view it on the stage through projection. Game system can be viewed through network, i.e. online. When one talks about projection, definitely should talk about computer and related electronic devices.

7. MOBILE PHONES

Mobile phones are electronic devices used for communication purpose. A news-letter (Technopedia) says about mobile phone that, 'it is a wireless handheld device that allows users to make calls and send text messages, among other features.'

Mobile phones have a worldwide specific purpose of communication. When the mobile phones are invented, their main function is to make and receive calls and to send and receive short message service (SMS). But the usage of mobile phones changed after the introduction of android software. This software is an operating system used in smartphones and tablets. After this, smartphones and tablets have many features including using multimedia. They started using multimedia message service (MMS) and well equipped cameras.

Mobile phones with smart technology are started to use in teaching and learning processes. This type of teaching and learning are common now a day.

8. MOBILE ASSISTED LANGUAGE TEACHING (MALT)

'Language technology' didn't leave the usage of mobile phone in language teaching and learning. The use of mobiles in language teaching can be termed as mobile assisted language teaching. The mobiles used for such purpose are smart phones with android or windows operating systems.

Mobile assisted Language Teaching (MALT) is one the latest invention of technology. Though mobile was introduced to this world 5 decades back, it is introduced to the field of education only a decade earlier. The major purpose of using mobiles in teaching and learning is to enrich the teaching styles and to make the learning ease for the students.

MALT is becoming popular now a day. Many educational institutions in the globe started using this type of language teaching in classroom. There are different softwares (apps) which can be downloaded and taught in a classroom.

Like computer aided language teaching, MALT also requires material production. The materials are produced using language experts. The materials are developed using the teaching approaches such as 'Simply to Complex' and 'Known to Unknown' which creates enthusiasm among the students and the teachers. Such produced materials should be incorporated into the mobile with the help of programming language. Finally the MALT will be designed by trained designers. Materials can be produced using the classroom teaching theory 'Simply to Complex' and 'Known to Unknown'.

9. ADVANTAGES

MALT is one of the fast growing technologies in language teaching. Though it has many advantages, a few are specified here:

- Portability
- Movability
- Interactivity
- Huge data storage
- Face-to-Face
- Anytime and anywhere usage
- One to more connectivity
- Individual activity and group activity
- Class assignments can be done easily

10. CONCLUSION

CALT / CALL, teaching using multimedia, online teaching, software teaching and learning, etc. brought drastic changes in the history of language teaching and learning. Both teachers and students are significant in this process. Some of the technological teaching aids are existing because of the best feature, interaction introduced by multimedia.

Mobile assisted language teaching (MALT) provides an efficient teaching in the classroom. It motivates and creates enthusiasm among the students in the classroom. The features such as Bluetooth and Wi-Fi in the mobiles provide more confidence in language teaching for the teachers.

In the near future the language classrooms will be equipped with the MALT teaching. Though mobile phones are restricted in some schools, the advantages of MALT will definitely remove such restriction in due course of time.

REFERENCES

1. Ahmad, Masqsood. (2010): Whether or Not CALT Offers Wide Range of Accessories to ESL Teachers to Exploit Language Teaching, University of Management and Technology, Lahore (PG Dissertation).
2. Bush, Vannevar. (1995): Science the Endless Frontier. National Science Foundation, USG Press, Washington.
3. Chinnery, G. (2006). Going to the MALL, Language Learning and Technology. Vol.10.
4. Crystal, David. (2001): Language and the Internet, Cambridge University Press, Cambridge.
5. Dekel, Gil. (2006): What does a Learning Technologist do. Cambridge University Press, Cambridge.
6. Dudeney, Gavin. (2000): The Internet and the Language Classroom, Cambridge University Press, Cambridge.
7. Ganesan, M. (2003): Material Preparation for CALT, Annamalai University Annamalai Nagar.
8. Gunduz, N. (2005): Computer Assisted Language (CALL). Journal of Language and Linguistic Studies, Vol.1 (Ed.2).
9. Han, J. (2010): Robot-aided learning and r-learning services. In D. Chugo (Ed.), Human-Robot Interaction. ACM, New York.
10. Hoffman, Paul. (1996): The Internet Instant Reference, BPB Publications, New Delhi.
11. Huges, Thomas. (2004): Human Built World: How to think about Technology and Culture, UC Press, Chicago.
12. Mohal Lal, Sam & Venkatesan, M. (2003): Producing Second Language Teaching Materials in Tamil for Net. Tamil Internet 2003, Asian Printers, Chennai.
13. Shuter, Robert. (2016): End the Classroom War on Mobile devices. Journal of International and intercultural Communication.
14. Thambi Jose, S Franklin. (2015): Materials Preparation for Web Teaching, International Research Journal of Engineering and Technology, Vol-02 Issue: 04, Pune.
15. Thambi Jose, S Franklin. (2011): Online Language Teaching, International Proceedings of Economics Development and Research, Volume-26, IACSIT Press, Singapore.
16. Wong, L. & Benson, P. (2006): In Service CALL Education: What happens after the course is over? In P. Hubbard & M. Levy (Eds.) Teacher education in CALL, The Netherlands, Amsterdam.